REMARKS

Claims 1-35 are pending in this application. Claims 1, 5-8, 15-17, 21-23, 29 and 30 have been amended. Claim 35 is new. Support for claim 35 is found in the specification at page 10, second paragraph. No new matter has been added. The Examiner has indicated that claims 6, 7, 15, 22 and 30 contain allowable subject matter. These claims have been amended to place them in condition for allowance.

Declaration

The Declaration that was submitted contains the city (Sexan) and the foreign country (DE=Germany). It is believed that the Declaration is in compliance with the rules.

Abstract

A new Abstract has been submitted wherein the former two paragraphs have been combined into a single paragraph.

Specification

The specification has been amended to delete all references to claim numbers in the written description.

Regarding the Degree Centigrade objection under item 3 on page 2 of the office action, the English translation hard copy that was submitted does not contain the "ϴ" symbol that the Examiner has indicated. The proper "°" symbol appears throughout the specification. Applicants representative wonders whether the English translation was scanned at the PTO and whether the scanning process replaced the proper degree centigrade symbol with "ϴ." Applicants representative has had this problem with the

newer versions of "Microsoft Word" on occasion. If the Examine requires another copy of the specification, please let us know.

Claim objections

The claims that the Examiner objected to on pages 2-4 of the office action have been amended to place them in proper dependent form.

Claims 1-5, 8-14, 16-21 23-29 and 31-34 have been rejected under 35 USC 102(b) as allegedly anticipated by Frater (US Patent No. 6,130,000). Applicant respectfully traversed this rejection.

The present invention is directed to a partition for use in the production of one or more multilayers or a multilayer pressed packet. The partition can be placed as a pressing sheet in the composite of a multilayer pressed packet to be produced, especially between two multilayers, characterized in that the partition is implemented as a steel sheet, but not as a high-grade steel sheet. The steel sheet, at a temperature of essentially 180° C, possesses a tensile strength of at least $Rm \geq 500$ MPa and, at a temperature of essentially 180° C, a yield strength of at least $Rp_{0.2} \geq 470$ MPa.

The inventors have found that the best surface conditions are achieved with a tensile strength of at least $Rm \geq 500$ MPa and, at a temperature of essentially 180° C, a yield strength of at least $Rp_{0.2} \geq 470$ MPa. The steel sheets can be produced that are free from cracks and pores. The steel sheets can have a decreased thickness and the number of multilayers per packet can be increased with the partition of the invention.

Frater does not disclose the combination of a tensile strength of at least $Rm \geq 500$ MPa at 180°C and a yield strength of at least $Rp_{0.2} \geq 470$ MPa. Further, Frater discloses a Knoop hardness that indicates that it relates to hard steel. The tensile strength of the present invention indicates that it relates to cat. soft steel.

Frater states that it is using a low carbon steel C1008 (SAE 1008, which is a US Standard) This standard does not give any min / max values for hardness or yield. It only states chemical analysis for

Carbonmax 0.10 %
Manganese 0,25 - 050 %
Phosphor max 0,04 %
Sulöphur max 0,05 %

The hardness or tensile strength of steel is mainly influenced by the chemical analysis. For low and medium carbon steels the formula is as below using the values of the cited SAE 1008

2 / 3 of Carbon = ~ 65
1 / 7 of Manganese = ~ 70
plus 270 (a fixed number resulting from cold reduction during rolling)

total 405 MPa equal to about 58.000 psi which corresponds to about Knoop 125.

This is calculated on above max allowable values for C and Mn. Normally steel is produced to about 2 /3 of max allowable values. This would even reduce the obtainable tensile for SAE 1008 to about 360 Mpa equal to about 51.000 psi or about Knoop 120.

It appears that Frater's disclosure of Knoop hardness between approx 150 and 850 is impossible based on physics. He furthermore states on column 7, line 20 that the steel gets harder by about 20 % when heated to 350 ° f. This also appears to be incorrect. There is no metal that gets harder at elevated temperatures. All metals get softer.

On page 9 of the translation, we indicate max values of 1,2 % for C and 1,5 % for Mn.

A typical example of the material of the invention has the following values:

C ~ 0,40
Mn ~ 0,70

Again using above formula, this is about 630 MPa equal to 90.000 psi or Knoop 200.

The Inventors have found that with 500 Mpa (71.000 lb/sqi), there is enough hardness to prevent image transfer.

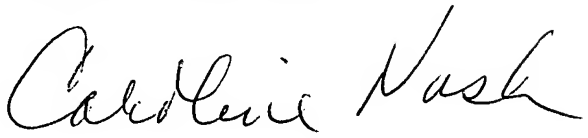
Similarly, the purpose of multilayer pressing, the yield point is a very important factor as well. The yield point stipulates how much power is needed until the impact on the steel results irreversible deformation. In the present invention, the yield point is a min. 470 MPa (or 94 % of the tensile strength).

Therefore, Frater does not anticipate the present claims.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

Date: April 6, 2005

By 

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